



UNITED STATES PATENT AND TRADEMARK OFFICE

ES
UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/818,211	03/27/2001	Chang-Won Kim	5000-1-176	2480
33942	7590	09/22/2004	EXAMINER	
CHA & REITER, LLC 210 ROUTE 4 EAST STE 103 PARAMUS, NJ 07652			BEAMER, TEMICA M	
			ART UNIT	PAPER NUMBER
			2681	
DATE MAILED: 09/22/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/818,211	KIM ET AL.
	Examiner Temica M. Beamer	Art Unit 2681

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 19 May 2004.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-8 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1,2 and 6 is/are rejected.
 7) Claim(s) 3-5,7,8 is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ . |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ . |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed May 19, 2004 with respect to the rejection(s) of claim(s) 1, 2 and 6 under 102 (e) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Bodell.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bodell.

Regarding claim 1, Bodell discloses a mobile communication system employing a plurality of digital optical links comprising a base station controller (BSC) (116) for managing overall control within said mobile system, said BSC coupled to a base transceiver system (BTS) (col. 4, lines 20-28; figures 1 and 2), a BTS controller (122) coupled to said BSC for managing the channel capacity of a plurality of compact BTSs (col. 4, lines 38-53, col. 5, lines 13-35, col. 5, lines 46-51; figures 1 and 2), a plurality of optical fiber links coupled to said BTS controller at one end via an optical coupling and

the plurality of said compact BTSSs at the other end (col. 4, lines 38-61; figures 1 and 2), said plurality of compact BTSSs having a plurality of optical transponders (i.e., the repeaters) inherently arranged in space relation with each other along each of said optical links; said optical transponders being operative for inherently receiving an up-link signal at one frequency to be retransmitted as a down-link signal and for amplifying said up-link signal at another frequency to other compact BTS along said optical fiber link (col. 9, lines 22-56).

Bodell, however, is silent as to how the BSC is coupled to the BTS and how the compact BTS controller is coupled to the BSC. Bodell does, however, disclose the use of T1 lines for coupling system parts together (col. 4, lines 23-27).

Therefore, at the time of invention, it would have been obvious to a person of ordinary skill in the art to modify Bodell by coupling the controllers and the BTS by using T1 lines, since such lines are known in the art to couple systems together as evidenced by Bodell.

Further, the examiner believes that the above limitations would render the claims patentable over the applied reference because it merely depends on how much information at one time one would like transmit or receive information in the system, without changing the scope of the invention of the applied reference.

Regarding claim 2, Bodell, as modified, discloses the system of claim 1, wherein said downlink signal corresponds to the radio frequency (RF) of said compact BTS, and wherein said amplified up-link signal is forwarded to the RF portion of said other compact BTS disposed along said optical fiber link (col. 9, lines 22-56).

Regarding claim 6, Bodell, as modified, discloses the system of claim 1. Bodell, however, fails to specifically disclose wherein the number of said optical fiber links is limited by the capacity of said BSC.

The examiner contends, however, that such a feature would have been obvious to one of ordinary skill in the art for the purpose of ensuring that excess links wouldn't be placed in the system if the capacity in a certain geographic were small.

Allowable Subject Matter

4. Claims 3-5, 7 and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. The following is a statement of reasons for the indication of allowable subject matter: Regarding claims 3 and 7, prior art fails to suggest or render obvious the detailed functions of the BTS controller and the optical transponders.

Regarding claims 4, 5 and 8, they are indicated allowable based on their dependency of allowable claims 3 and 7.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Temica M. Beamer whose telephone number is (703)

Art Unit: 2681

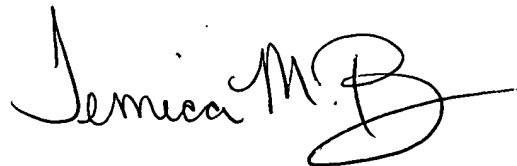
306-5837. The examiner can normally be reached on Monday-Thursday (alternate Fridays) 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on (703) 308-4825. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Temica M. Beamer
Examiner
Art Unit 2681

September 20, 2004

A handwritten signature in black ink, appearing to read "Temica M. Beamer". The signature is fluid and cursive, with "Temica" on the left, "M." in the middle, and "Beamer" on the right, all connected by a single continuous line.